8.13 Waste Management

The Henrietta Peaker Project (HPP) consists of a 91.4-megawatt (MW) (net), natural-gas-fired, simple-cycle power plant located approximately 10 miles southwest of Lemoore, California, on a seven-acre portion of a 20-acre parcel owned by GWF Energy LLC. The HPP will interconnect to the existing adjacent Pacific Gas and Electric Company (PG&E) Henrietta Substation through a new 550-foot 70-kilovolt (kV) transmission line supported on two new transmission poles. Other linear facilities include an approximately 16.5-foot water interconnection pipeline (from the site property boundary) and a 2.2-mile Southern California Gas Company natural gas interconnection pipeline. Additionally, approximately five acres will be used for temporary construction laydown and parking.

This section presents an evaluation of the potential environmental and human health effects related to hazardous and nonhazardous wastes generated by the proposed HPP. Refer to Section 2.0 (Project Description) of this Application for Certification (AFC) for a full project description. This section discusses the environmental condition of the proposed HPP and issues related to the generation, handling, and disposal of wastes.

8.13.1 Affected Environment

Land use in the surrounding area is primarily agricultural and industrial, with the exception of a few businesses and residences in the vicinity. Land use in the area of the proposed HPP is discussed in more detail in Section 8.4 of this AFC. The parcel is undeveloped and currently under cultivation in cotton. The topography of much of the site and surrounding area is flat.

A Phase I Environmental Site Assessment of the 20-acre parcel was performed by Harding ESE (Harding, 2001) and can be found in Appendix F. The assessment established that no adverse environmental conditions exist at the HPP site.

8.13.2 Waste Generation, Storage, and Handling

This section describes the wastes that will be produced during the construction and operation and maintenance of the proposed HPP, and the storage and handling facilities

associated with these wastes. Waste categories include sanitary wastewater, nonhazardous solid and liquid wastes, and hazardous solid and liquid wastes.

8.13.2.1 Construction

Both nonhazardous and hazardous wastes will be generated during the construction phase of the proposed project. Only small amounts of hazardous wastes will be generated and, when handled properly, neither nonhazardous nor hazardous wastes will significantly impact the environment or human health.

Nonhazardous Wastes. The types of nonhazardous wastes that will be generated during the construction phase of the HPP primarily include debris and other materials requiring removal during site grading and excavation. These materials consist of paper, wood, glass, plastics, excess concrete, scrap metal, calcium silicate insulation, mineral wool insulation, empty nonhazardous material containers, steel cuttings, packaging metal, and electrical wiring waste. Approximately 40 cubic yards of these loosely packed materials will be generated weekly during construction. Recycling of wastes will be maximized to include materials such as scrap metal, copper wire, empty containers, and absorbent materials. Approximately 20 cubic yards of wastes will be recycled every two to three weeks during construction. The remaining wastes will be placed into covered, temporary storage containers for periodic removal and will be disposed of at an offsite Class II or III land disposal facility.

Some nonhazardous wastewater will also be generated during the construction phase of the proposed HPP. This wastewater will consist of sanitary wastewater, equipment wash water, and stormwater runoff. Sanitary waste will be collected in portable chemical toilets, removed from the site, and disposed of periodically by licensed contractors. Equipment wash water will be collected and contained in designated areas and will be recycled where feasible or removed from the site for appropriate treatment and disposal. Stormwater runoff will be managed in accordance with best management practices (BMPs).

All nonhazardous wastes generated during the construction phase will be handled and disposed of according to standard procedures and all applicable laws, ordinances, regulations, and standards (LORS).

Hazardous Wastes. Small amounts of contaminated soil or other solids and small volumes of waste oil, cleaning fluids, solvents, paints, batteries, lighting lamps, and welding materials may be generated during the construction phase of the proposed project. Many of these wastes will be recycled under the "excludable recyclable" provision of Title 22 of the California Health and Safety Code. The wastes that require disposal will be characterized based on generator knowledge or analytical testing to determine the appropriate management and handling. Once properly characterized, the wastes will be temporarily stored at the site in appropriate containers, according to all applicable hazardous waste storage LORS. Wastes will be managed appropriately at a recycling/transformation facility or an offsite Class I Treatment, Storage, or Disposal Facility (DSTF).

The construction contractor will be considered the generator of the hazardous wastes and will be responsible for handling, storage, transfer, and disposal of the hazardous wastes generated. Hazardous wastes will be stored on site for less than 90 days, in accordance with all applicable LORS. The approximate volumes of hazardous wastes generated during the construction of the project are listed in Table 8.13-1.

All hazardous wastes generated during the construction phase will be handled and disposed of according to standard procedures and applicable LORS. When handled properly, these hazardous wastes will not impact the environment or human health.

8.13.2.2 Operation and Maintenance

Both nonhazardous and hazardous wastes will be generated during operation and maintenance of the proposed HPP. The primary waste will be nonhazardous wastewater. These wastes and their estimated quantities are discussed below.

Nonhazardous Wastes. The types of nonhazardous wastes that will be generated during operation and maintenance of the proposed HPP include sanitary wastewater, surface water runoff, solid maintenance wastes, and standard office wastes. Where appropriate, wastes will be recycled, and the remaining wastes will be placed into appropriate storage containers until periodic removal from the site.

All sanitary wastewater will be routed to the onsite septic tank/leach field. All other wastewater will be handled and disposed of according to standard procedures and all applicable LORS.

Water collected from the off-line combustion turbine compressor washing will drain to a wastewater holding tank and be disposed off site. Wastewater from the transformer sump drains and various plant drains will be connected to an oil-water separator unit. The clean water from the oil-water separator will be recycled on site for process water or discharged to the wastewater management system. On-line wash of the combustion turbine generators with demineralized water will not generate wastewater. Stormwater collected from areas of the plant not subject to oil contamination will drain to an onsite evaporation/infiltration detention basin.

The facility will produce solid wastes from maintenance and office activities typical of industrial facilities. These wastes include rags, broken and rusted metal and machine parts, defective or broken electrical materials, empty containers, pallets and wood materials, and other solid wastes. Where appropriate, wastes will be recycled; the remaining wastes will be placed into covered, temporary storage containers and periodically removed for disposal at an offsite Class III land disposal facility.

All nonhazardous wastes generated during operation and maintenance will be handled and disposed of according to standard procedures and all applicable LORS.

Hazardous Wastes. Types of hazardous waste that will be generated during operation and maintenance of the proposed HPP include selective catalytic reduction (SCR) catalyst, waste oils, off-line turbine wash wastewater, and other maintenance wastes (Table 8.13-2). Many of these wastes will be recycled under the "excludable recyclable" provisions of Title 22 of the California Health and Safety Code. The wastes that require disposal will be characterized based on generator knowledge or analytical testing to determine the appropriate management and handling. Once properly characterized, the wastes will be temporarily stored at the site in appropriate containers, according to all applicable hazardous waste storage LORS. When appropriate, the wastes will be transported by a licensed hazardous waste hauler to a recycling facility or an offsite Class I TSDF. The handling, storage, transfer, and disposal of hazardous wastes will comply with all applicable LORS. When handled properly, the hazardous

wastes generated during operation and maintenance of the proposed project will not impact the environment or human health.

It is estimated that approximately 525 cubic feet of waste SCR and/or carbon monoxide (CO) catalyst will be generated periodically. The catalysts will be returned to the manufacturer for metals reclamation and/or disposal. Other hazardous wastes expected to be generated at the HPP during operation and maintenance include paint and thinner waste, lead acid batteries, natural gas filters, consumer-type batteries, spent sandblast media, and nonempty aerosol cans. A description of these wastes is included in Table 8.13-2. Heavy metals are present in the SCR and CO catalysts, which are considered hazardous wastes, if not recycled.

The combustion turbine has a capacity of 7,400 gallons for lubricating oil. It is estimated that this amount of lubricating oil will be replaced every 10 years. These oils must be replaced to ensure proper operation of the turbines. Approximately 300 gallons of waste oils from other equipment will be generated annually. These oils will be recycled where feasible. Glycol used in the combustion turbine generator cooling system will be replaced periodically and recycled if feasible or disposed of off site. The off-line turbine wash wastewater will be drained to a dedicated storage tank, characterized and disposed of off site as appropriate.

Properly trained personnel will be present during the handling of hazardous materials/wastes in the event of an accidental release of these materials. All hazardous wastes generated during operation and maintenance will be handled and disposed of according to standard procedures and all applicable LORS.

The HPP will obtain a hazardous waste generator ID number as required by the Resource Conservation and Recovery Act (RCRA) and California Department of Toxic Substances Control (DTSC).

8.13.3 Waste Disposal Sites

This section reviews the nonhazardous and hazardous waste disposal facilities that may feasibly be used for disposal of wastes associated with the HPP.

8.13.3.1 Nonhazardous Waste Disposal Facilities

Nonhazardous wastes will be removed from the site periodically for disposal or recycling. All nonhazardous waste from the city of Lemoore goes to the local materials recovery facility, where it is sorted and recyclables removed. The remaining waste is then transferred to the Chemical Waste Management facility in Kettleman City. The Kings Waste Recycling Authority (KWRA) has an agreement with Chemical Waste Management to send nonhazardous waste from the cities of Lemoore, Hanford, and Corcoran to the Kettleman Hills facility (Cooke, 2001). The facility has a permitted capacity of 10.7 million cubic yards, with future plans to increase the capacity to 16.7 million cubic yards. Currently, the remaining capacity is 6 million cubic yards. If the current intake volume remains constant, the estimated closure date is 2007. However, the proposed expansion will extend the closure date to the year 2013. The facility is not involved in any major cleanup actions that could affect the future availability of the facility (Yarbrough, 2001).

8.13.3.2 Hazardous Waste Disposal Facilities

The hazardous waste generated at the HPP will be disposed of at a nearby hazardous waste TSDF. In California, there are three major commercial Class I disposal facilities that accept hazardous wastes. The status of these facilities is summarized below.

Chemical Waste Management Kettleman Hills Facility (EPA ID# CAT000646117). This permitted Class I disposal facility is located in Kings County off State Route (SR) 41 west of Kettleman City. It is approximately 15 miles from the proposed HPP site. The categories of wastes handled at this facility include organic sludges and solids, polychlorinated biphenyls (PCBs) with a concentration of less than 50 parts per million (ppm), pesticides, cyanide and sulfide reactives, halogenated and nonhalogenated solvents, substances with metals that exceed the Toxicity Characterization Leaching Procedures (TCLP) and/or California hazardous waste limits, and waste acids, caustics, and oil. Onsite treatment and disposal methods include evaporation, landfilling, neutralization, pesticide hydrolysis, and stabilization. The facility has a permitted capacity of 10.7 million cubic yards, with future plans to increase the capacity to 16.7 million cubic yards. The remaining capacity is 6 million cubic yards. If the current intake volume remains constant, the estimated closure date is 2007.

However, the proposed expansion will extend the closure date to the year 2013. The facility is not involved in any major cleanup actions that could affect the future availability of the facility (Yarbrough, 2001).

Safety-Kleen® Environmental Services (Formerly Laidlaw Environmental Services) Buttonwillow Facility (EPA ID# CAD980675276). This permitted Class I disposal facility is located in Kern County on Lokern Road between SR 33 and SR 58, near Buttonwillow. The facility is approximately 70 miles from the proposed HPP site. The categories of wastes handled at this facility include aqueous wastes, contaminated soil, inorganic and organic sludges, PCBs with a concentration of less than 50 ppm, cyanide and sulfide reactives, and substances with metals exceeding concentration limits set by the TCLP and/or California hazardous waste limits. Onsite treatment and disposal methods include evaporation, landfilling, and solidification/stabilization. The facility has a permitted capacity of 13,800,000 cubic yards and a remaining capacity of 10,850,000 cubic yards. The estimated closure date is 2036. The facility is not involved in any major cleanup actions that could affect the future availability of the facility (Buona, 2001).

Safety-Kleen® Environmental Services (Formerly Laidlaw Environmental Services) Imperial Valley Disposal Facility (EPA ID# CAD000633164). This permitted Class I disposal facility is in Imperial Valley, approximately seven miles west of Westmoreland on SR 86. It is approximately 300 miles from the proposed HPP site. The categories of wastes handled at this facility include aqueous wastes, contaminated soil, inorganic and organic sludges and solids, latex paint sludges, PCBs with concentrations of less than 50 ppm, pesticides, substances with metals that exceed the TCLP limits and/or California hazardous waste limits, and waste acid, caustic, and oil sludges. Onsite treatment and disposal methods include landfilling, microencapsulation, neutralization, and solidification/stabilization. After planned construction of two additional land disposal cells (2,600,000 cubic yards), the facility will have a permitted capacity of 6,100,000 cubic yards. The available capacity is approximately 2,500,000 cubic yards. The annual usage is approximately 115,000 cubic yards. Based on this annual usage, the estimated closure date is 2020. With construction of the two additional cells, the estimated closure date is 2050. The facility is not involved in any major cleanup actions that could affect the future availability of the facility (Smith, 2001).

8.13.3.3 Waste Recycling Facilities

All nonhazardous waste from the city of Lemoore goes to the local materials recovery facility, where it is sorted and the recyclables removed.

8.13.3.4 Waste Disposal Impacts

This section describes the potential impacts the proposed HPP may have on the aforementioned hazardous and nonhazardous waste disposal capacities. Many of the wastes generated by the HPP will be recycled, minimizing the amount of wastes for disposal and the impacts on waste disposal capacities.

Nonhazardous Waste Impacts. It is anticipated that nonhazardous waste disposal from the proposed HPP will not significantly decrease the capacity of the waste disposal facilities used by the project. With active waste recycling efforts in place, along with the currently available Class II or III waste disposal capacity, the incremental decrease in available waste disposal capacity resulting from the proposed HPP can be considered insignificant.

Hazardous Waste Impacts. It is anticipated that hazardous waste disposal from the proposed HPP will not significantly decrease the capacity of the waste disposal facilities used by the project. With active waste recycling efforts in place, along with the currently available Class I waste disposal capacity, the incremental decrease in available waste disposal capacity resulting from the proposed HPP can be considered insignificant.

8.13.4 Facility Closure Issues

Facility closure of the proposed HPP involves either temporary or permanent closure. Temporary closure could occur due to general facility maintenance; replacement of one or more critical operating components of the facility; a disruption in the supply of critical natural gas, chemicals, or labor; or a natural occurrence beyond the control of plant operators (e.g., flooding, earthquake, fire, etc.). Permanent closure of the facility could result from similar causes, but could also include causes such as facility obsolescence, irreparable damage to the facility, economic forces, or other unforeseen causes. The waste management issues associated

with the temporary or permanent closure of the HPP are discussed below. See Section 4.0 (Facility Closure) for more information.

8.13.4.1 Temporary Closure

In the case of an unforeseen temporary closure of the facility in which there is no accidental release of hazardous materials, a contingency plan for cessation of operations will be implemented. This plan will be prepared before the facility begins operation and will ensure that, throughout temporary closure, all facility operations comply with LORS. Depending on the length of the closure, hazardous materials may be eliminated from the facility by removing materials from their respective storage containers and/or by halting delivery of hazardous materials. In the former case, wastes removed from their storage containers will be disposed of according to all applicable LORS. It is also possible that temporary closure of the facility could lead to the cessation of waste-generating activities. In this case, periodic removal of wastes from the facility will be halted until needed again.

If an accidental release of hazardous materials is associated with an unforeseen temporary closure in the facility, procedures set forth in the Hazardous Materials Business Plan, as described in Section 8.12 (Hazardous Materials Handling), will be followed. The business plan will be prepared before the facility begins operation and will ensure that appropriate measures are developed to respond to an accidental release of hazardous materials, clean up hazardous materials, and notify authorities and the public of the hazardous materials release.

8.13.4.2 Permanent Closure

Management of hazardous and nonhazardous wastes for permanent facility closure will be addressed in the general closure plan. At the time of permanent closure, recycling efforts will be maximized to prevent excess of waste generation. Unused chemicals will be sold back to the suppliers, other purchasers, or users. To protect the environment and human health, equipment containing hazardous material residue will be decommissioned, according to a decommissioning plan that will be prepared at the appropriate time. Nonhazardous wastes will be removed from the facility and disposed of in a Class II or III land disposal facility.

8.13.5 Monitoring

The environmental impacts caused by the construction and operation of the HPP are expected to be minimal; therefore, extensive monitoring programs are not required. Wastes will be monitored in accordance with the generator permit requirements throughout the life of the plant.

8.13.6 Impacts

The nonhazardous waste generated at the HPP will add to the total waste generated in Kings County and in California. However, there are adequate recycling facilities and landfill capacity to dispose of the waste from Kings County over the next 40 to 50 years. The impact of the solid waste generated by the plant is therefore not considered to be individually or cumulatively significant. No significant, indirect impacts on nonhazardous waste disposal or recycling from materials suppliers are anticipated.

The hazardous waste generated at the facility will be recycled and treated to the extent possible. California has more than adequate treatment and disposal capacity for the hazardous wastes that cannot be recycled. The impact of hazardous waste generated by the project is not individually or cumulatively significant. No significant, indirect impacts on nonhazardous waste disposal or recycling from materials suppliers are anticipated.

8.13.7 Waste Mitigation Measures

No significant impacts are anticipated from the handling and management of wastes generated at the HPP facility. The handling and management of the waste will follow the hierarchy approach of waste reduction set forth in Public Resources Code (PRC) Section 40000 et seq. (i.e., source reduction, waste recycling, and waste disposal). A plan, as well as associated performance reports, will be prepared for reducing the generation of hazardous waste. These best management practices will ensure that there are no significant impacts resulting from the project.

During the construction and the operations and maintenance phases of the project, minor quantities of nonhazardous wastes will be generated. With proper mitigation measures, a

significant portion of these wastes can be diverted from the local Class II or III disposal facility. Where feasible, these wastes will be recycled or reused.

The mitigation measures for hazardous wastes are as follows:

- Prior to initiation of the project construction phase, construction employees will receive hazardous-waste-related training that focuses on recognition of potential contaminated soil and/or groundwater (e.g., that may be encountered during subsurface excavations for foundations or pipeline trenches) and contingency procedures to be followed to protect worker safety and public health.

- A detailed waste management plan will be prepared prior to startup to ensure proper storage, labeling, packaging, record keeping, manifesting, minimization, and disposal of all hazardous materials and wastes. The waste management plan will include:

  - A description of each hazardous waste stream
  - Handling, transport, treatment, and disposal procedures for each waste
  - Preparedness, prevention, contingency, and emergency procedures
  - Personnel training

- Prior to facility startup, an application will be made to the California Department of Toxic Substances Control (DTSC) for a hazardous waste generator number. The facility will not treat, store, or dispose of hazardous waste in a manner that will cause the facility to be characterized as a TSDF.

- All hazardous wastes will be stored on site for less than 90 days (or other accumulation periods, as allowed by 22 California Code of Regulations [CCR] 66262.34 for hazardous waste generators) and will be managed in accordance with state and federal hazardous waste generator requirements. Hazardous wastes, as well as hazardous materials that are spilled or otherwise become unsuitable for use, will be stored in an appropriately segregated hazardous waste storage area. Hazardous waste will be stored in a commercially available storage shed with integral secondary containment or in a sealed concrete hazardous waste storage area to control leaks and spills. Secondary containment areas will be sized to hold a volume equal to at least 110 percent of the largest tank (or container).

  If hazardous wastes are stored out-of-doors, the secondary containment structure will also have a volume equal to at least the capacity of the largest tank (or container) plus the volume of rainfall from a 25-year, 24-hour storm event, or will be covered to prevent rainwater from collecting in the containment basin. The hazardous waste storage area will be inspected and

maintained frequently. Inspections and maintenance activities will be documented.

- Hazardous wastes will be transported by a licensed hazardous waste transporter and disposed of at an offsite hazardous waste facility. Hazardous wastes will be transported off site using hazardous waste manifests. Copies of manifests, reports, waste analyses, exception reports, land disposal restriction notices/certifications, destruction certifications, etc. will be kept on site and accessible for inspection for three years.

- A spill control and management plan will be developed for the HPP before commercial operation. The purpose of the spill control and management plan is to avoid spills and accidental mixing of incompatible chemicals during transfer of chemicals. The design features for the spill control and management plan will include secondary containment, collection, and treatment systems. The spill control and management plan is further discussed in Section 8.12 (Hazardous Materials Handling).

- Facility employees will receive hazardous materials training as required by the Occupational Safety and Health Administration's Hazard Communication Standard. Additionally, employees will be trained in hazardous waste procedures, spill contingencies, and waste minimization procedures. Hazardous waste training will include, but not be limited to, the following subjects:

  - Hazardous waste characteristics
  - Use and management of containers
  - Waste packaging
  - Marking and labeling
  - Accumulation/storage areas
  - Inspections
  - Preparedness and prevention
  - Emergency equipment
  - Contingency plan
  - Emergency response procedures
  - Hazardous waste manifesting
  - Spill response and containment
  - Waste minimization

- Procedures to minimize hazardous waste generation will be established. Employees will be trained in procedures to reduce the volume of hazardous

waste generated at the HPP. The procurement of hazardous materials will be controlled to minimize surplus materials on site and to prevent unused materials from becoming "off-spec." Nonhazardous materials will be used in lieu of hazardous materials whenever possible. Hazardous materials will be reused whenever possible. Hazardous wastes will be recycled whenever possible.

Environmental impacts related to waste management issues caused by the construction (including pipelines and transmission facilities) and operation of the HPP are expected to be minimal. Therefore, extensive monitoring programs are not required. The volumes and characteristics of waste generated during construction and operation of the proposed HPP will be monitored in accordance with requirements stipulated in appropriate regulatory permits obtained for the project.

With the implementation of the above measures the HPP will comply with all applicable LORS and will not result in significant impacts.

8.13.8 Proposed Conditions of Certifications

Proposed conditions of certification are contained in Appendix K. These conditions are proposed in order to ensure compliance with applicable LORS and/or to reduce potentially significant impacts to less-than-significant levels.

8.13.9 Laws, Ordinances, Regulations, and Standards

The following section lists the LORS that apply to the hazardous waste storage, handling, and disposal activities for the proposed HPP. These LORS are in place to protect employees, the environment, and the surrounding community from exposure to hazardous and nonhazardous wastes. The applicable LORS are summarized in Table 8.13-3.

8.13.9.1 Federal

Hazardous and nonhazardous wastes are governed in part by RCRA. As required by RCRA, an application for a hazardous waste generator identification number will be coordinated through the U.S. Environmental Protection Agency and the DTSC.

Title 40, Code of Federal Regulations (CFR), Parts 260–272 govern the generation, transportation, treatment, storage, and disposal of hazardous waste through a comprehensive management system. These sections also list the characteristics of hazardous wastes, including ignitability, corrosivity, reactivity, and toxicity. Subtitle D of these parts grants authority for regulating nonhazardous waste to the state.

Title 49 CFR, Parts 172, 173, and 179 provide standards for labels, placards, and markings on hazardous waste shipments by truck, and standards for packaging hazardous wastes.

Title 42, United States Code, Section 6922 sets forth standards applicable to generators of hazardous waste regarding record keeping, labeling practices, informing hazardous waste transporters of general composition of wastes, use of a manifest system, and reporting requirements from the generators.

8.13.9.2 State

The Hazardous Waste Control Act of 1972 is codified in Section 25100 et seq. of the California Health and Safety Code. Regulations addressing the management of hazardous wastes are found in 22 CCR 66001 et seq. These management issues include:

- Characterizing wastes
- Obtaining a waste identification number
- Implementing a waste reduction program
- Manifesting wastes
- Packaging and labeling wastes
- Record keeping
- Monitoring
- Emergency preparedness

Title 22 CCR, Section 67100 (Hazardous Waste Source Reduction and Management Review) requires waste generators to develop a plan for reducing hazardous

wastes, depending on the quantities of hazardous waste generated. Then, if applicable, generators must prepare a hazardous waste management performance report every four years.

Health and Safety Code, Section 25500 et seq. (Hazardous Materials Business Plans) require emergency response plans from facilities storing hazardous materials in excess of 55 gallons, 500 pounds, and 200 cubic feet, as appropriate. Hazardous wastes or mixtures of hazardous wastes are included in the definition of hazardous materials. Inventories prepared in accordance with this requirement will include information on hazardous wastes.

Nonhazardous wastes are governed in part by the California Integrated Waste Management Act of 1989, which is found in PRC Section 40000 et seq. This law serves as a guide for an integrated statewide system of solid waste management, which includes efforts for solid waste handling, disposal, source reduction, recycling, and land disposal safety.

Title 22 CCR, Sections 66260–66270 establish hazardous waste regulations for generators and transporters of hazardous wastes, and owners of hazardous waste DSTFs.

The Porter-Cologne Water Quality Control Act regulates wastes that have the potential to cause loss of beneficial use of California's waters. This act requires the State Water Resources Control Board to establish reportable quantities of hazardous wastes and hazardous materials based on their potential to degrade the waters of the state. Any discharge of hazardous materials that is not consistent with the discharge requirements must be reported to the appropriate authorities.

8.13.9.3 Local

As stipulated in the Kings County Zoning Ordinance, the proposed HPP must comply with the appropriate setbacks required by the Kings County Fire Department for fire safety. The Kings County Division of Environmental Health Services will serve as the Certified Uniform Program Agency (CUPA) for the proposed project. Any other local agencies or LORS that are applicable to the HPP will be addressed before the construction and operation of the project.

8.13.10 Involved Agencies

The agencies that will provide regulatory oversight during the construction and operation of the proposed HPP are the Kings County Division of Environmental Health Services, the Central Valley Regional Water Quality Control Board, and DTSC. Agency contacts are presented below.

Involved Agencies and Agency Contacts

Agency	Contact	Reason for Involvement
Kings County Planning Department 330 Campus Drive Hanford, CA 93230	Steve Sopp (559) 584-1411	Assistance with solid waste management facilities, CEQA, and similar information.
Kings County Division of Environmental Health Services 330 Campus Drive Hanford, CA 93230	Raymond Cooke/Permit Assistance Center (559) 584-1411	Assistance with waste handling and regulation. Notification required if pre-existing onsite contaminated soil is considered hazardous. Issues Hazardous Waste Generator License equivalent via acceptance of facility's Hazardous Materials Business Plan.
Kings County Fire Department		Management of hazardous materials and fire response.
Department of Toxic Substances Control 400 P Street P.O. Box 806 Sacramento, CA 95812-0806	U.S. EPA ID Center (916) 324-1781	Application for U.S. EPA identification number.

CEQA = California Environmental Quality Act
U.S. EPA = U.S. Environmental Protection Agency

8.13.11 Waste Management Permits Required

Prior to construction of the proposed HPP, the project will obtain a U.S. Environmental Protection Agency identification number from the DTSC. Application and qualification for this identification number are dependent on the quantities and characteristics of the wastes generated at the HPP.

8.13.12 References

Buona, Marianna, 2001. Safety-Kleen Landfill, Buttonwillow, California. Telephone number: (661) 762-6200. Personal Communication with Angela Liang (URS Oakland) on June 8.

Cooke, Raymond, 2001. Kings County Division of Environmental Health Services. Telephone number: (559) 584-1411. Personal Communication with Angela Liang (URS Oakland) on June 28.

Harding ESE, 2001. *Phase 1* Environmental *Site Assessment: GWF Power Systems, Henrietta Peaker, 25th Avenue, Henrietta, California.* June 1.

Smith, Allen, 2001. Environmental Manager, Safety-Kleen® Landfill, Imperial County, Westmorland Facility, California. Telephone number: (760) 344-9400. Personal communication with Angela Liang (URS Oakland) on June 8.

Yarbrough, Terri, 2001. Chemical Waste Management Inc., Kettleman Hills Facility; Telephone number: (559) 386-6115. Personal communication with Angela Liang (URS Oakland) on June 9.

TABLES

Table 8.13-1
Hazardous Wastes Generated During Construction

Hazardous Waste	Description	Approximate Quantity Generated
Empty hazardous material containers	Contains hazardous materials residue	1 cubic yard/week
Solvents, used construction equipment lube oils, paint, adhesives, and wastewater contaminated by oil, etc.	Various hazardous wastes	7 to 10 55-gallon drums/month
Used and waste lube oil during CT lube oil flushes	Excludable recyclable material	<55 gallons/3 weeks
Oily rags, oil absorbent from CT lube oil flushes	Contaminated with excludable recyclable material	1 to 2 55-gallon drums/3 weeks
Oily rags, oil absorbent generated during normal construction activities (excluding lube oil flushes)	Contaminated with excludable recyclable material	3 to 4 55-gallon drums/month
Consumer-type lighting lamps	Waste lamps	<50 pounds/year
Spent batteries; lead acid	Potentially recyclable	145 pounds/year
Consumer-type batteries	Waste batteries, dry, containing potassium hydroxide, solid (contains manganese dioxide)	65 pounds/year

CT = combustion turbine

Table 8.13-2
Hazardous Wastes Generated During Operation and Maintenance Phase

Hazardous Waste	Description	Approximate Quantity Generated
SCR and CO catalysts	Waste catalyst (contains heavy metals)	17,500 pounds/ periodically
Lubricating oil	Excludable recyclable material	7,400 gallons/10 years
Used oil	Excludable recyclable material	300 gallons/year
Paint & thinner waste	Waste paint-related material, 3, UN1263, PG II (D001)	<100 gallons/year
Lead acid batteries	Waste batteries, wet, filled with acid, 8, PGIII, UN3028	Less than 575 pounds/year
Natural gas filters	Spent natural gas filters, non-RCRA hazardous waste, solid	75 pounds/year
Consumer-type batteries	Waste batteries, dry, containing potassium hydroxide, solid (contains manganese dioxide)	Less than 65 pounds/year
Fluorescent lamps	Used lamps, "universal waste"	Less than 50 pounds/year
Oil filters	Used filters, excludable recyclable materials	Less than 500 pounds/year
Nonempty aerosol cans	Waste aerosols, 2.1 (contains flammable liquid)	Less than 50 pounds/year

CO = carbon monoxide
RCRA = Resource Conservation and Recovery Act
SCR = selective catalytic reduction

Table 8.13-3
Waste Management Laws, Ordinances, Regulations, and Standards

Jurisdiction	Authority	Administering Agency	Requirements & Compliance	AFC Conformance Section
Federal	RCRA, 40 CFR §§ 260–272	U.S. EPA, Region IX	Management of hazardous wastes. California is an authorized state for RCRA.	8.13.2
	49 CFR §§ 172, 173, and 179	CHP and DOT	Project will meet standards for labels, placards, packaging, and markings on hazardous waste shipments.	8.13.2
	42 USC § 6922, Solid Waste Disposal Act/RCRA	U.S. EPA, Region IX and Cal-EPA, DTSC	Project will meet standards for record keeping, labeling practices, notification requirements, use of a manifest system, and reporting requirements from generators.	8.13.2
State	Hazardous Waste Control Act of 1972, as amended; California Health & Safety Code § 25100 et seq.; 22 CCR § 66001 et seq.	DTSC; Kings County – Division of Environmental Health Services	Management of hazardous wastes.	8.13.2
	22 CCR § 67100	Kings County – Division of Environmental Health Services	Project will prepare a plan for reducing hazardous waste generation, and prepare associated performance report.	8.13.5
	California Health & Safety Code §§ 25500–25541	CIWMB; Kings County – Division of Environmental Health Services	Project will ensure nonhazardous wastes are disposed of separately and appropriately from hazardous wastes.	8.13.2
	California Integrated Waste Management Act of 1989, PRC § 40000 et seq.	CIWMB; Kings County – Division of Environmental Health Services	Management of solid waste.	8.13.2

Table 8.13-3 (continued)
Waste Management Laws, Ordinances, Regulations, and Standards

Jurisdiction	Authority	Administering Agency	Requirements & Compliance	AFC Conformance Section
State	22 CCR §§ 66260–66270	DTSC; Kings County – Division of Environmental Health Services	Project will comply with regulations for generators of hazardous wastes.	8.13.2
	California Porter-Cologne Water Quality Control Act	SWRCB; RWQCB Central Valley Region	Project will comply with waste discharge requirements for septic system and injection wells, if applicable.	8.14.2
Local	Kings County Zoning Ordinance, Development Standards	Kings County Fire Department	Project will comply with safety setbacks.	8.7.3.1, 8.7.3.2
Industry Codes	AICHE–Center for Chemical Process Safety, 1985 Guidelines	California OES	Project will comply with chemical hazard evaluation procedures as required.	8.12.6

AICHE = American Institute of Chemical Engineers
CCR = California Code of Regulations
CFR = Code of Federal Regulations
CHP = California Highway Patrol
CIWMB = California Integrated Waste Management Board
DOT = Department of Transportation
OES = Office of Emergency Services
PRC = Public Resources Code
RCRA = Resource Conservation and Recovery Act
RWQCB = Regional Water Quality Control Act
USC = United States Code